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EXAMINER	
KAO, JUTAI	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/553,539	MONNIER ET AL.	
	Examiner	Art Unit	
	JUTAI KAO	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because some of the labeled elements are not accompanied with descriptive texts on the drawings (i.e. element 11, 15-18 on Fig. 1). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 4 is objected to because of the following informalities: grammatical error. The passage recites "Converter according to claim 1, intended to convert digital signals transmitted by satellite", which is grammatically incorrect (fragment). Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1 and 10, the claims recites the remultiplexing of "said portions extracted from at least one remultiplexed flow". However, as suggested by the claim and the drawings, the portions are extracted from "demultiplexed flow". It appears to the Examiner that the "remultiplexed flow" is actually a "demultiplexed flow". Please amend the claim accordingly or provide an explanation of which remultiplexed flow is being remultiplexed again by the remultiplexing means.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naden (WO 01/56297) in view of Finfrock (US 4,787,028).

Naden discloses a home video distribution and storing system including the following features.

Regarding claim 1, converter (see HSB 702 in Fig. 7) of digital signals (see "digital TV signals" recited on page 4, line 21) received in modulated and multiplexed form (see "Each desired baseband signal is then demodulated and demultiplexed..." recited on page 2, line 23, that is, each baseband signal, when received is originally modulated and multiplexed), comprising means for selecting (see RF switch 202 and

Tuners 204 in Fig. 7) at least one part of said signal by adjustment at at least one determined frequency (see "The output of the switch is connected to one or more 6-MHz TV tuners, which are used to down convert the wide band signal containing up to 175 channels into the desired 6 MHz baseband signal(s)" recited on page 2, lines 20-23) and means for demodulating (see demodulators 206 in Fig. 7) the said parts, capable of producing at least one demodulated subsignal (see "Each desired baseband signal is then demodulated..." recited on page 2, line 23), the said converter also comprising: means for demultiplexing (see Transport Demux of element 206 shown in Fig. 7) the said subignals designed to extract portions of the said subsignals (see ("Each desired baseband signal is then demodulated and demultiplexed..." recited on page 2, line 23; and see "demux chains for respectively converting the baseband video signals into corresponding transport streams" recited in claim 1, wherein the transport streams represent the claimed extracted portions of the said subsignals); means for remultiplexing (see Mux 208 in Fig. 7) the said portions extracted from at least one remultiplexed flow (see Fig. 7, wherein the Mux takes in the extracted flows from the demux chains 206 and remultiplexes the extracted transport streams); means for transforming said remultiplexed flow designed to modify said remultiplexed flow in compliance with specific criteria for transmission to recipient receivers, said transformation means being provided to modify said remultiplexed flow so as to make it comply with at least one communication protocol (see Wireless Protocol 212, base station radio transceiver 214, Internet Access Modem 210 and Wireless Internet Access Unit 502 in Fig. 7, which modify the remultiplexed flow to comply with communication

protocols, such as that provided by the wireless protocol 212, also "Internet access modem 210 can be implemented by, for example,...Satellite Express 2530 XL USB...Satellite Receiver...for other Internet communication means such as Telco POTS, Telco xDSL or cable modems, that correspondingly different modems 210 would be provided" recited on page 8, lines 15-21; each different types of modem are used for different communication protocol, and the remultiplexed streams are modified accordingly).

Regarding claim 3, wherein at least one of said communication protocols is a protocol for communication to a digital network, preferentially chosen from among the standards Ethernet, IEEE1394, IEEE802.11a and Hiperlan2 (see "HiperLan2" recited on page 9, line 11).

Regarding claim 4, wherein the converter is intended to convert digital signals transmitted by satellite (see "The coax cables 108 from the satellite TV receivers..." recited on page 6, line 26).

Regarding claim 5, wherein the selection and demodulation means are designed to select and demodulate transmission digital channels in order to produce said subsignals (see "After demodulation...the resulting signal consists of MPEG2 Transport streams..." recited on page 7, lines 13-15; wherein the transport streams are the produced subsignal).

Regarding claim 6, wherein the demultiplexing means are designed to extract audiovisual programmes constituting at least some of the said portions (see "MPEG2 audio/video packetized elementary streams" recited on page 7, lines 15-16).

Regarding claim 7, wherein the remultiplexing means are capable of remultiplexing said portions into MPEG transport streams constituting said remultiplexed flows (see :Multiplexer…creating a new MPEG-2 transport stream which is a merged version of the MPEG-2 streams which feed such multiplexer" recited on page 8, lines 2-4).

Regarding claim 8, wherein the converter also comprises means for extracting extraction information received from recipient receivers, and in that the transformation means are capable of determining said subsignals and said portions according to said extraction information (see "each SSTB receiving entity sends program selection signals to the base station indicating the channel(s) desired for viewing…and subsequently re-multiplexed into a new MPEGII stream for broadcast to the collection of SSTBs" recited on page 8, lines 25 to page 9, line 3).

Regarding claim 9, wherein the converter also comprises means for modulating feedback signals from recipient receivers (see Internet access modem 210 in Fig. 2 or 7, wherein the Modem is a modulater/demodulater, which receives signal from the recipient devices 116 via the base station radio transceiver 214 and wireless protocol 212 prior to modulating and sending the signal upstream to the satellite system 122).

Regarding claim 10, conversion procedure for digital signals (see "digital TV signals" recited on page 4, line 21) received in modulated and multiplexed form (see "Each desired baseband signal is then demodulated and demultiplexed…" recited on page 2, line 23, that is, each baseband signal, when received is originally modulated and multiplexed), in which adjustment at at least one determined frequency selects at

least one part of said signals (see "The output of the switch is connected to one or more 6-MHz TV tuners, which are used to down convert the wide band signal containing up to 175 channels into the desired 6 MHz baseband signal(s)" recited on page 2, lines 20-23) and said parts are demodulated so as to produce at least one demodulated subsignal (see "Each desired baseband signal is then demodulated..." recited on page 2, line 23), said procedure comprising the following stages: demultiplexing of said subsignals, so as to extract portions of said subsignals (see ("Each desired baseband signal is then demodulated and demultiplexed..." recited on page 2, line 23; and see "demux chains for respectively converting the baseband video signals into corresponding transport streams" recited in claim 1, wherein the transport streams represent the claimed extracted portions of the said subsignals); remultiplexing the said portions extracted from at least one remultiplexed flow (see Fig. 7, wherein the Mux takes in the extracted flows from the demux chains 206 and remultiplexes the extracted transport streams); transformation of said remultiplexed flow in accordance with specific criteria for transmission to recipient receivers, so as to render the remultiplexed flow compliant with at least one communication protocol (see Wireless Protocol 212, base station radio transceiver 214, Internet Access Modem 210 and Wireless Internet Access Unit 502 in Fig. 7, which modify the remultiplexed flow to comply with communication protocols, such as that provided by the wireless protocol 212, also "Internet access modem 210 can be implemented by, for example,...Satellite Express 2530 XL USB...Satellite Receiver...for other Internet communication means such as Telco POTS, Telco xDSL or cable modems, that correspondingly different modems 210 would be

provided" recited on page 8, lines 15-21; each different types of modem are used for different communication protocol, and the remultiplexed streams are modified accordingly).

Regarding claim 11, receiver of multiplexed digital signals compliant with a communication protocol (see "slave STBs" recited on page 9, lines 14), wherein said receiver comprises means for the preparation and transmission via uplink communication of transmission information (see "uplink signals from STBs" recited on page 9, lines 14); said receiver being preferentially designed to received a remultiplexed flow from a converter according to claim 1 (see Fig. 1, wherein the slave STB116 receives the remultiplexed flows from the Master STB 110, see Fig. 2 or 7, which shows the remultiplexing by the Master STB 110).

Naden does not disclose the following features: regarding claim 1, means for extracting transmission information received from the recipient receivers, transformation means being capable of determining the transmission criteria according to said transmission information; wherein said transmission information of a recipient receiver depends on the type of recipient receiver or on the network type to which it belongs; regarding claim 2, wherein the transformation means are able to return said remultiplexed flow in accordance with at least two communication protocols associated with the same physical layer; regarding claim 10, extraction of transmission information received from said recipient receivers, the transformation stage comprising a determination of transmission criteria according to this transmission information, wherein said transmission information of a recipient receiver depends on the type of

recipient receiver or on the network type to which it belongs; said conversion procedure being preferentially implemented by means of a converter in accordance with claim 1; regarding claim 11, wherein said transmission information comprising information on at least one communication protocol associated with the said receiver, said transmission information depending on the type of receiver or network to which it belongs.

Finfrock discloses a multicommunication protocol controller including the following features.

Regarding claim 1, means for extracting transmission information received from the recipient receivers (see "The host processor, using the address of the controller...retrieve...the communication protocol which will be used by the controller..." recited in column 1, lines 49-59, wherein the host processor includes the claimed means for extracting and the controllers represents the claimed recipient receivers), transformation means being capable of determining the transmission criteria according to said transmission information receivers (see "The host processor, using the address of the controller...retrieve...the communication protocol which will be used by the controller..." recited in column 1, lines 49-59, wherein the host processor includes the claimed transformation means and information looked up by the host processor represents the claimed transmission information/criteria); wherein said transmission information of a recipient receiver depends on the type of recipient receiver or on the network type to which it belongs (see "which contains a plurality of programs associated with different types of communication protocol…that are used by the remote processing devices…" recited in column 2, lines 34-40).

Regarding claim 2, wherein the transformation means are able to return said remultiplexed flow (see rejection of claim 1) in accordance with at least two communication protocols associated with the same physical layer (see "different types of communication protocol" recited in column 2, lines 36-37).

Regarding claim 10, extraction of transmission information received from said recipient receivers (see "The host processor, using the address of the controller...retrieve...the communication protocol which will be used by the controller..." recited in column 1, lines 49-59, wherein the host processor includes the claimed means for extracting and the controllers represents the claimed recipient receivers), the transformation stage comprising a determination of transmission criteria according to this transmission information (see "The host processor, using the address of the controller...retrieve...the communication protocol which will be used by the controller..." recited in column 1, lines 49-59, wherein the host processor includes the claimed transformation means and information looked up by the host processor represents the claimed transmission information/criteria), wherein said transmission information of a recipient receiver depends on the type of recipient receiver or on the network type to which it belongs (see "which contains a plurality of programs associated with different types of communication protocol...that are used by the remote processing devices..." recited in column 2, lines 34-40).; said conversion procedure being preferentially implemented by means of a converter in accordance with claim 1 (see rejection of claim 1).

Regarding claim 11, wherein said transmission information comprising information on at least one communication protocol associated with the said receiver, said transmission information depending on the type of receiver or network to which it belongs (see "which contains a plurality of programs associated with different types of communication protocol...that are used by the remote processing devices..." recited in column 2, lines 34-40).

It would have been obvious to modify the system of Naden using features, as taught by Finfrock in order to "provide a processing system which can accommodate a plurality of remote processing devices each of which can operate under a different communication protocol (as recited in column 1, line 31-34 of Finfrock).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUTAI KAO whose telephone number is (571)272-9719. The examiner can normally be reached on Monday ~Friday 7:30 AM ~5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571)272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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